

Chapter 525: Effluent Guidelines and Standards

SUMMARY: This rule establishes procedures and criteria for setting technology-based effluent limitations in waste discharge licenses. Included are general provisions regarding establishing effluent limits, test procedures, units of measurement, and categories of pollutants. The rule also sets maximum effluent limits for certain toxic pollutants and performance standards for secondary treatment at publicly owned treatment works. Finally, the rule incorporates by reference effluent standards for various industrial sectors, as set forth in the Code of Federal Regulations, Chapter 40, Subchapter N. To aid the reader, a citation to the appropriate federal regulation is shown in each section of this rule.

Section 1. References to Federal Regulations and definitions. Portions of this rule refer to federal regulations of the United States Environmental Protection Agency (EPA). Unless otherwise specified, the federal regulations referenced are those regulations effective as of July 1, 1998, as they appear in volume 40 of the Code of Federal Regulations (CFR). Definitions for terms used in this rule may be found Chapter 520. Where the terms "Part" or "Sec." appear in this rule, they mean the specific Part or Section of 40 CFR which is referenced.

Section 2. Toxic Pollutants. [see 40 CFR 129]**Subsection I. Scope and purpose.** [see 40 CFR 129.1]

- (a) The provisions of this section apply to owners or operators of specified facilities discharging into navigable waters.
- (b) The effluent standards or prohibitions for toxic pollutants established in this section shall be applicable to the sources and pollutants hereinafter set forth, and may be incorporated in any NPDES permit, modification or renewal thereof, in accordance with the provisions of this section.
- (c) The provisions of 40 CFR parts 124 and 125 shall apply to any NPDES permit proceedings for any point source discharge containing any toxic pollutant for which a standard or prohibition is established under this Chapter.

Subsection II Definitions. [see 40 CFR 129.2]

All terms not defined herein shall have the meaning given them in the Act or in chapter 520. As used in this section, the term:

- (a) Act means the Federal Water Pollution Control Act, as amended (Pub. L. 92-500, 86 Stat. 816 et seq., 33 U.S.C. 1251 et seq.). Specific references to sections within the Act will be according to Pub. L. 92-500 notation.
- (b) Administrator means the Administrator of the Environmental Protection Agency or any employee of the Agency to whom the Administrator may by order delegate the authority to carry out his or her functions under section 307(a) of the Act, or any person who shall by operation of law be authorized to carry out such functions.

- (c) Effluent standard means, for purposes of section 307 of the Act, the equivalent of effluent limitation as that term is defined in section 502(11) of the Act with the exception that it does not include a schedule of compliance.
- (d) Prohibited means that the constituent shall be absent in any discharge subject to these standards, as determined by any analytical method.
- (f) Working day means the hours during a calendar day in which a facility discharges effluents subject to this Chapter.
- (g) Ambient water criterion means that concentration of a toxic pollutant in a navigable water that, based upon available data, will not result in adverse impact on important aquatic life, or on consumers of such aquatic life, after exposure of that aquatic life for periods of time exceeding 96 hours and continuing at least through one reproductive cycle; and will not result in a significant risk of adverse health effects in a large human population based on available information such as mammalian laboratory toxicity data, epidemiological studies of human occupational exposures, or human exposure data, or any other relevant data.
- (h) New source means any source discharging a toxic pollutant, the construction of which is commenced after proposal of an effluent standard or prohibition applicable to such source if such effluent standard or prohibition is thereafter promulgated in accordance with section 307 of the Act.
- (i) Existing source means any source which is not a new source as defined above.
- (j) Source means any building, structure, facility, or installation from which there is or may be the discharge of toxic pollutants designated as such by the Administration under section 307(a)(1) of the Act.
- (l) Construction means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.
- (m) Manufacturer means any establishment engaged in the mechanical or chemical transformation of materials or substances into new products including but not limited to the blending of materials such as pesticidal products, resins, or liquors.
- (n) Process wastes means any designated toxic pollutant, whether in wastewater or otherwise present, which is inherent to or unavoidably resulting from any manufacturing process, including that which comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product and is discharged into the navigable waters.
- (o) Air emissions means the release or discharge of a toxic pollutant by an owner or operator into the ambient air either (1) by means of a stack or (2) as a fugitive dust, mist or vapor as a result inherent to the manufacturing or formulating process.
- (p) Fugitive dust, mist or vapor means dust, mist or vapor containing a toxic pollutant regulated under this Chapter which is emitted from any source other than through a stack.

- (q) Stack means any chimney, flue, conduit, or duct arranged to conduct emissions to the ambient air.
- (r) Ten year 24-hour rainfall event means the maximum precipitation event with a probable recurrence interval of once in 10 years as defined by the National Weather Service in Technical Paper No. 40, Rainfall Frequency Atlas of the United States, May 1961, and subsequent amendments or equivalent regional or State rainfall probability information developed therefrom.

Subsection III. Abbreviations. [see 40 CFR 129.3]

The abbreviations used in this Chapter represent the following terms:

lb = pound (or pounds).
g = gram.
ug/l = micrograms per liter (1 one-millionth gram/liter).
kg = kilogram(s).
kkg = 1000 kilogram(s).

Subsection IV. Toxic pollutants. [see 40 CFR 129.4]

The following are the pollutants subject to regulation under the provisions of this section:

- (a) Aldrin/Dieldrin--Aldrin means the compound aldrin as identified by the chemical name, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro -1,4 -endo-5,8-exo-dimethanonaphthalene; ``Dieldrin" means the compound the dieldrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7 - epoxy - 1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-exo-dimethanonaphthalene.
- (b) DDT--DDT means the compounds DDT, DDD, and DDE as identified by the chemical names:(DDT)-1,1,1-trichloro-2,2 - bis(p -chlorophenyl)ethane and someo,p'-isomers; (DDD) or (TDE) -1,1 - dichloro - 2,2-bis(p-chlorophenyl) ethane and some o,p'-isomers; (DDE) - 1,1 - dichloro-2,2-bis(p-chlorophenyl) ethylene.
- (c) Endrin--Endrin means the compound endrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy - 1,4,4a,5,6,7,8,8a -octahydro - 1,4-endo-5,8-endodimethanonaphthalene.
- (d) Toxaphene--Toxaphene means a material consisting of technical grade chlorinated camphene having the approximate formula of C₁₀H₁₀Cl₈ and normally containing 67-69 percent chlorine by weight.
- (e) Benzidine--Benzidine means the compound benzidine and its salts as identified by the chemical name 4,4'-diaminobiphenyl.
- (f) Polychlorinated Biphenyls (PCBs) polychlorinated biphenyls (PCBs) means a mixture of compounds composed of the biphenyl molecule which has been chlorinated to varying degrees.

Subsection V. Compliance. [see 40 CFR 129.5]

- (a)

- (1) Within 60 days from the date of promulgation of any toxic pollutant effluent standard or prohibition each owner or operator with a discharge subject to that standard or prohibition must notify the Department of such discharge. Such notification shall include such information and follow such procedures as the Department may require.
 - (2) Any owner or operator who does not have a discharge subject to any toxic pollutant effluent standard at the time of such promulgation but who thereafter commences or intends to commence any activity which would result in such a discharge shall first notify the Department in the manner herein provided at least 60 days prior to any such discharge.
- (b) Upon receipt of any application for issuance or reissuance of a permit or for a modification of an existing permit for a discharge subject to a toxic pollutant effluent standard or prohibition the permitting authority shall proceed thereon in accordance with 40 CFR part 124 or 125, whichever is applicable.
- (c)
- (1) Every permit which contains limitations based upon a toxic pollutant effluent standard or prohibition under this Chapter is subject to revision following the completion of any proceeding revising such toxic pollutant effluent standard or prohibition regardless of the duration specified on the permit.
 - (2) For purposes of this section, all toxic pollutants for which standards are set under this Chapter are deemed to be injurious to human health within the meaning of section 402(k) of the Act unless otherwise specified in the standard established for any particular pollutant.
- (d)
- (1) Upon the compliance date for any section 307(a) of the Act toxic pollutant effluent standard or prohibition, each owner or operator of a discharge subject to such standard or prohibition shall comply with such monitoring, sampling, recording, and reporting conditions as the Department may require for that discharge. Notice of such conditions shall be provided in writing to the owner or operator.
 - (2) In addition to any conditions required pursuant to paragraph (d)(1) of this subsection and to the extent not required in conditions contained in NPDES permits, within 60 days following the close of each calendar year each owner or operator of a discharge subject to any toxic standard or prohibition shall report to the Department concerning the compliance of such discharges. Such report shall include, as a minimum, information concerning (i) relevant identification of the discharger such as name, location of facility, discharge points, receiving waters, and the industrial process or operation emitting the toxic pollutant; (ii) relevant conditions (pursuant to paragraph (d)(1) of this subsection or to an NPDES permit) as to flow, section 307(a) of the Act toxic pollutant concentrations, and section 307(a) of the Act toxic pollutant mass emission rate; (iii) compliance by the discharger with such conditions.
 - (3) When samples collected for analysis are composited, such samples shall be composited in proportion to the flow at time of collection and preserved in compliance with requirements of the Department, but shall include at least five samples, collected at approximately equal intervals throughout the working day.
- (e)
- (1) Nothing in these regulations shall preclude a Regional Administrator from requiring in any permit a more stringent effluent limitation or standard pursuant to section 301(b)(1)(C) of the Act and implemented in Chapter 524 and other related provisions of 40 CFR part 125.

- (2) Nothing in these regulations shall preclude the Department from requiring in any permit a more stringent effluent limitation or standard pursuant to section 301(b)(1)(C) of the Act and implemented in Chapter 523 and other related provisions of 40 CFR part 124.
- (f) Any owner or operator of a facility which discharges a toxic pollutant to the navigable waters and to a publicly owned treatment system shall limit the summation of the mass emissions from both discharges to the less restrictive standard, either the direct discharge standard or the pretreatment standard; but in no case will this paragraph allow a discharge to the navigable waters greater than the toxic pollutant effluent standard established for a direct discharge to the navigable waters.
- (g) In any permit hearing or other administrative proceeding relating to the implementation or enforcement of these standards, or any modification thereof, or in any judicial proceeding other than a petition for review of these standards pursuant to section 509(b)(1)(C) of the Act, the parties thereto may not contest the validity of any national standards established in this Chapter, or the ambient water criterion established herein for any toxic pollutant.

Subsection VI. Adjustment of effluent standard for presence of toxic pollutant in the intake water. [see 40 CFR 129.6]

- (a) Upon the request of the owner or operator of a facility discharging a pollutant subject to a toxic pollutant effluent standard or prohibition, the Department shall give credit, and shall adjust the effluent standard(s) in such permit to reflect credit for the toxic pollutant(s) in the owner's or operator's water supply if (1) the source of the owner's or operator's water supply is the same body of water into which the discharge is made and if (2) it is demonstrated to the Department that the toxic pollutant(s) present in the owner's or operator's intake water will not be removed by any wastewater treatment systems whose design capacity and operation were such as to reduce toxic pollutants to the levels required by the applicable toxic pollutant effluent standards in the absence of the toxic pollutant in the intake water.
- (b) Effluent limitations established pursuant to this section shall be calculated on the basis of the amount of section 307(a) toxic pollutant(s) present in the water after any water supply treatment steps have been performed by or for the owner or operator.
- (c) Any permit which includes toxic pollutant effluent limitations established pursuant to this section shall also contain conditions requiring the permittee to conduct additional monitoring in the manner and locations determined by the Department for those toxic pollutants for which the toxic pollutant effluent standards have been adjusted.

Subsection VII. Requirement and procedure for establishing a more stringent effluent limitation. [see 40 CFR 129.7]

- (a) In exceptional cases:
- (1) Where the Department determines that the ambient water criterion established in these standards is not being met or will not be met in the receiving water as a result of one or more discharges at levels allowed by these standards, and
 - (2) Where he or she further determines that this is resulting in or may cause or contribute to significant adverse effects on aquatic or other organisms usually or potentially present, or on human health, he or she may issue to an owner or operator a permit or a permit modification

- containing a toxic pollutant effluent limitation at a more stringent level than that required by the standard set forth in these regulations. Any such action shall be taken pursuant to the procedural provisions of Chapters 522 and 524, as appropriate. In any proceeding in connection with such action the burden of proof and of going forward with evidence with regard to such more stringent effluent limitation shall be upon the Department as the proponent of such more stringent effluent limitation.
- (3) Evidence in such proceeding shall include at a minimum: Analysis using data and other information to demonstrate receiving water concentrations of the specified toxic pollutant, projections of the anticipated effects of the proposed modification on such receiving water concentrations, and the hydrologic and hydrographic characteristics of the receiving waters including the occurrence of dispersion of the effluent. Detailed specifications for presenting relevant information by any interested party may be prescribed in guidance documents published from time to time, whose availability will be announced in the Federal Register.
- (b) Any effluent limitation in an NPDES permit which a State proposes to issue which is more stringent than the toxic pollutant effluent standards promulgated by the Administrator is subject to review by the Administrator under section 402(d) of the Act. The Administrator may approve or disapprove such limitation(s) or specify another limitation(s) upon review of any record of any proceedings held in connection with the permit issuance or modification and any other evidence available to him or her. If he or she takes no action within ninety days of this receipt of the notification of the action of the permit issuing authority and any record thereof, the action of the State permit issuing authority shall be deemed to be approved.

Subsection VIII. Compliance date. [see 40 CFR 129.8]

- (a) The effluent standards or prohibitions set forth herein shall be compiled with not later than one year after promulgation unless an earlier date is established by the Administrator for an industrial subcategory in the promulgation of the standards or prohibitions.
- (b) Toxic pollutant effluent standards or prohibitions set forth herein shall become enforceable under sections 307(d) and 309 of the Act on the date established in paragraph (a) of this subsection regardless of proceedings in connection with the issuance of any NPDES permit or application therefor, or modification or renewal thereof.

Subsection IX. Aldrin/dieldrin. [see 40 CFR 129.100]

- (a) Specialized definitions.
- (1) Aldrin/Dieldrin manufacturer means a manufacturer, excluding any source which is exclusively an aldrin/dieldrin formulator, who produces, prepares or processes technical aldrin or dieldrin or who uses aldrin or dieldrin as a material in the production, preparation or processing of another synthetic organic substance.
- (2) Aldrin/Dieldrin formulator means a person who produces, prepares or processes a formulated product comprising a mixture of either aldrin or dieldrin and inert materials or other diluents, into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et. seq.).
- (b) Aldrin/dieldrin manufacturer--

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by aldrin/dieldrin as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection; and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of aldrin/dieldrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent standard--

(i) Existing sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin manufacturer.

(ii) New Sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin manufacturer.

(c) Aldrin/dieldrin formulator--

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by aldrin/dieldrin as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection; and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of aldrin/dieldrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

- (2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.
- (3) Effluent standard--
 - (i) Existing sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin formulator.
 - (ii) New sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin formulator.

Subsection X. DDT, DDD and DDE. [see 40 CFR 129.101]

(a) Specialized definitions.

- (1) DDT Manufacturer means a manufacturer, excluding any source which is exclusively a DDT formulator, who produces, prepares or processes technical DDT, or houses DDT as a material in the production, preparation or processing of another synthetic organic substance.
- (2) DDT formulator means a person who produces, prepares or processes a formulated product comprising a mixture of DDT and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).

(b) DDT manufacturer--

(1) Applicability.

(i) These standards or prohibitions apply to:

- (A) All discharges of process wastes; and
- (B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by DDT as a result of the manufacturing process, including but not limited to:
 - (1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection; and
 - (2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of DDT; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

- (2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.
- (3) Effluent standard--
 - (i) Existing sources. DDT is prohibited in any discharge from any DDT manufacturer.
 - (ii) New sources. DDT is prohibited in any discharge from any DDT manufacturer.

(c) DDT formulator--

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by DDT as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection; and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of DDT; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent standard--

(i) Existing sources. DDT is prohibited in any discharge from any DDT formulator.

(ii) New Sources. DDT is prohibited in any discharge from any DDT formulator.

Subsection XI. Endrin. [see 40 CFR 129.102]

(a) Specialized definitions.

(1) Endrin Manufacturer means a manufacturer, excluding any source which is exclusively an endrin formulator, who produces, prepares or processes technical endrin or houses endrin as a material in the production, preparation or processing of another synthetic organic substance.

(2) Endrin Formulator means a person who produces, prepares or processes a formulated product comprising a mixture of endrin and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).

(b) Endrin manufacturer--

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

- (B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by endrin as a result of the manufacturing process, including but not limited to:
 - (1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection; and
 - (2) Water used for routine cleanup or cleanup of spills.
- (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of endrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.
- (2) Analytical method acceptable--Environmental Protection Agency method specified in 40 CFR part 136.
- (3) Effluent standard--
 - (i) Existing sources. Discharges from an endrin manufacturer shall not contain endrin concentrations exceeding an average per working day of 1.5 ug/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.0006 kg/kkg of endrin produced; and shall not exceed 7.5 ug/l in a sample(s) representing any working day.
 - (ii) New sources. Discharges from an endrin manufacturer shall not contain endrin concentrations exceeding an average per working day of 0.1 ug/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.00004 kg/kkg of endrin produced; and shall not exceed 0.5 ug/l in a sample(s) representing any working day.
 - (iii) Mass emission standard during shutdown of production. In compassing the allowable monthly average daily loading figure required under the preceding paragraphs (b)(3) (i) and (ii) of this subsection, for any calendar month for which there is no endrin being manufactured at any plant or facility which normally contributes to the discharge which is subject to these standards, the applicable production value shall be deemed to be the average monthly production level for the most recent preceding 360 days of actual operation of the plant or facility.
- (c) Endrin formulator--
 - (1) Applicability.
 - (i) These standards or prohibitions apply to:
 - (A) All discharges of process wastes; and
 - (B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by endrin as a result of the formulating process, including but not limited to:
 - (1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection; and
 - (2) water used for routine cleanup or cleanup of spills.

- (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of endrin; or to storm-water runoff that exceeds that from the ten year 24-hour rainfall event.
- (2) Analytical method acceptable--Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.
- (3) Effluent standard--
 - (i) Existing sources. Endrin is prohibited in any discharge from any endrin formulator.
 - (ii) New sources--Endrin is prohibited in any discharge from any endrin formulator.
- (d) The standards set forth in this subsection shall apply to the total combined weight or concentration of endrin, excluding any associated element or compound.

Subsection XII. Toxaphene. [see 40 CFR 129.103]

- (a) Specialized definitions.
 - (1) Toxaphene manufacturer means a manufacturer, excluding any source which is exclusively a toxaphene formulator, who produces, prepares or processes toxaphene or who uses toxaphene as a material in the production, preparation or processing of another synthetic organic substance.
 - (2) Toxaphene formulator means a person who produces, prepares or processes a formulated product comprising a mixture of toxaphene and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).
- (b) Toxaphene manufacturer--
 - (1) Applicability.
 - (i) These standards or prohibitions apply to:
 - (A) All discharges of process wastes; and
 - (B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by toxaphene as a result of the manufacturing process, including but not limited to:
 - (1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection; and
 - (2) water used for routine cleanup or cleanup of spills.
 - (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of toxaphene; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable--Environmental Protection Agency method specified in 40 CFR part 136.

(3) Effluent standard--

- (i) Existing sources. Discharges from a toxaphene manufacturer shall not contain toxaphene concentrations exceeding an average per working day of 1.5 ug/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.00003 kg/kkg of toxaphene produced, and shall not exceed 7.5 ug/l in a sample(s) representing any working day.
- (ii) New sources. Discharges from a toxaphene manufacturer shall not contain toxaphene concentrations exceeding an average per working day of 0.1 ug/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.000002 kg/kkg of toxaphene produced, and shall not exceed 0.5 ug/l in a sample(s) representing any working day.
- (iii) Mass emission during shutdown of production. In computing the allowable monthly average daily loading figure required under the preceding paragraphs (b)(3)(i) and (ii) of this subsection, for any calendar month for which there is no toxaphene being manufactured at any plant or facility which normally contributes to the discharge which is subject to these standards, the applicable production value shall be deemed to be the average monthly production level for the most recent preceding 360 days of actual operation of the plant or facility.

(c) Toxaphene formulator--

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by toxaphene as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection; and

(2) water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of toxaphene; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable--Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent standards--

(i) Existing sources. Toxaphene is prohibited in any discharge from any toxaphene formulator.

(ii) New sources. Toxaphene is prohibited in any discharge from any toxaphene formulator.

- (d) The standards set forth in this subsection shall apply to the total combined weight or concentration of toxaphene, excluding any associated element or compound.

Subsection XIII. Benzidine. [see 40 CFR 1291.04]

(a) Specialized definitions.

- (1) Benzidine Manufacturer means a manufacturer who produces benzidine or who produces benzidine as an intermediate product in the manufacture of dyes commonly used for textile, leather and paper dyeing.
- (2) Benzidine-Based Dye Applicator means an owner or operator houses benzidine-based dyes in the dyeing of textiles, leather or paper.

(b) Benzidine manufacturer--

(1) Applicability.

(i) These standards apply to:

- (A) All discharges into the navigable waters of process wastes, and
- (B) All discharges into the navigable waters of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-containing product as a result of the manufacturing process, including but not limited to:

- (1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection, and
- (2) Water used for routine cleanup or cleanup of spills.

- (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable--Environmental Protection Agency method specified in 40 CFR part 136.

(3) Effluent standards--

- (i) Existing sources. Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 ug/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 ug/l in a sample(s) representing any working day.
- (ii) New sources. Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 ug/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 ug/l in a sample(s) representing any working day.

- (4) The standards set forth in this paragraph (b) shall apply to the total combined weight or concentration of benzidine, excluding any associated element or compound.

(c) Benzidine-based dye applicators--

(1) Applicability.

(i) These standards apply to:

- (A) All discharges into the navigable waters of process wastes, and
- (B) All discharges into the navigable waters of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-containing product as a result of the manufacturing process, including but not limited to:

- (1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection, and
- (2) Water used for routine cleanup or cleanup of spills.

- (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to storm water that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable.

- (i) Environmental Protection Agency method specified in 40 CFR part 136; or
- (ii) Mass balance monitoring approach which requires the calculation of the benzidine concentration by dividing the total benzidine contained dyes used during a working day (as certified in writing by the manufacturer) by the total quantity of water discharged during the working day.

[Comment: The Regional Administrator (or State Director, if appropriate) shall rely entirely upon the method specified in 40 CFR part 136 in analyses performed by him or her for enforcement purposes.]

(3) Effluent standards--

- (i) Existing sources. Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 ug/calculated over any calendar month; and shall not exceed 25 ug/l a sample(s) or calculation(s) representing any working day.
- (ii) New sources. Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 ug/l calculated over any calendar month; and shall not exceed 25 ug/l in a sample(s) or calculation(s) representing any working day.

- (4) The standards set forth in this paragraph (c) shall apply to the total combined concentrations of benzidine, excluding any associated element or compound.

Subsection XIV. Polychlorinated biphenyls (PCBs). [see 40 CFR 129.105]

(a) Specialized definitions.

- (1) PCB Manufacturer means a manufacturer who produces polychlorinated biphenyls.
- (2) Electrical capacitor manufacturer means a manufacturer who produces or assembles electrical capacitors in which PCB or PCB-containing compounds are part of the dielectric.
- (3) Electrical transformer manufacturer means a manufacturer who produces or assembles electrical transformers in which PCB or PCB-containing compounds are part of the dielectric.

(b) PCB manufacturer--

(1) Applicability.

(i) These standards or prohibitions apply to:

- (A) All discharges of process wastes;
- (B) All discharges from the manufacturing or incinerator areas, loading and unloading areas, storage areas, and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:

- (1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this subsection; and
- (2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten-year 24-hour rainfall event.

- (2) Analytical Method Acceptable--Environmental Protection Agency method specified in 40 CFR part 136 except that a 1-liter sample size is required to increase analytical sensitivity.
- (3) Effluent standards--

- (i) Existing sources. PCBs are prohibited in any discharge from any PCB manufacturer;
- (ii) New sources. PCBs are prohibited in any discharge from any PCB manufacturer.

(c) Electrical capacitor manufacturer--

(1) Applicability.

(i) These standards or prohibitions apply to:

- (A) All discharges of process wastes; and
- (B) All discharges from the manufacturing or incineration areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:

- (1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this subsection; and
 - (2) Water used for routine cleanup or cleanup of spills.
- (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten-year 24-hour rainfall event.
- (2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase analytical sensitivity.
- (3) Effluent standards--
 - (i) Existing sources. PCBs are prohibited in any discharge from any electrical capacitor manufacturer;
 - (ii) New sources. PCBs are prohibited in any discharge from any electrical capacitor manufacturer.
- (d) Electrical transformer manufacturer--
 - (1) Applicability.
 - (i) These standards or prohibitions apply to:
 - (A) All discharges of process wastes; and
 - (B) All discharges from the manufacturing or incineration areas, loading and unloading areas, storage areas, and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:
 - (1) Storm water and other runoff except as hereinafter provided in paragraph (d)(1)(ii) of this section; and
 - (2) Water used for routine cleanup or cleanup of spills.
 - (ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten-year 24-hour rainfall event.
 - (2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR part 136, except that a 1-liter sample size is required to increase analytical sensitivity.
 - (3) Effluent standards--
 - (i) Existing sources. PCBs are prohibited in any discharge from any electrical transformer manufacturer;
 - (ii) New sources. PCBs are prohibited in any discharge from any electrical transformer manufacturer.
- (e) Adjustment of effluent standard for presence of PCBs in intake water. Whenever a facility which is subject to these standards has PCBs in its effluent which result from the presence of PCBs in its intake waters, the owner may apply to the Department, for a credit pursuant to the provisions of Sec. 129.6, where the source of the water supply is the same body of water into which the

discharge is made. The requirement of paragraph (1) of Sec. 129.6(a), relating to the source of the water supply, shall be waived, and such facility shall be eligible to apply for a credit under Sec. 129.6, upon a showing by the owner or operator of such facility to the Department that the concentration of PCBs in the intake water supply of such facility does not exceed the concentration of PCBs in the receiving water body to which the plant discharges its effluent.

Section 3. Secondary Treatment. [see 40 CFR 133]

Subsection I. Purpose. [see 40 CFR 133.100]

This Section provides information on the level of effluent quality attainable through the application of secondary or equivalent treatment.

Subsection II. Definitions. [see 40 CFR 133.101]

Terms used in this section are defined as follows:

- (a) 7-day average. The arithmetic mean of pollutant parameter values for samples collected in a period of 7 consecutive days.
- (b) 30-day average. The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.
- (c) Act. The Clean Water Act (33 U.S.C. 1251 et seq., as amended).
- (d) BOD. The five day measure of the pollutant parameter biochemical oxygen demand (BOD).
- (e) CBOD-5. The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD-5).
- (f) Effluent concentrations consistently achievable through proper operation and maintenance. (1) For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and (2) a 7-day average value equal to 1.5 times the value derived under paragraph (f)(1) of this subsection.
- (g) Facilities eligible for treatment equivalent to secondary treatment. Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (subsection VI), if:
 - (1) The BOD-5 and SS effluent concentrations consistently achievable through proper operation and maintenance (paragraph (f)) of the treatment works exceed the minimum level of the effluent quality set forth in Subsections III(a) and (b),
 - (2) A trickling filter or waste stabilization pond is used as the principal process, and
 - (3) The treatment works provide significant biological treatment of municipal wastewater.
- (h) mg/l. Milligrams per liter.
- (i) NPDES. National Pollutant Discharge Elimination System.
- (j) Percent removal. A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.
- (k) Significant biological treatment. The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of a least 65 percent removal BOD-5.

- (l) SS. The pollutant parameter total suspended solids.
- (m) Significantly more stringent limitation means BOD-5 and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD-5 and SS), or the percent removal limitations in Subsections III and VI, if such limits would, by themselves, force significant construction or other significant capital expenditure.

Subsection III. Secondary treatment. [see 40 CFR 133.102]

The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters--

BOD-5, SS and pH. All requirements for each parameter shall be achieved except as provided for in Subsections IV and VI.

(a) BOD-5.

- (1) The 30-day average shall not exceed 30 mg/l.
- (2) The 7-day average shall not exceed 45 mg/l.
- (3) The 30-day average percent removal shall not be less than 85 percent.
- (4) At the option of the NPDES permitting authority, in lieu of the parameter BOD-5 and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD-5 may be substituted with the following levels of the CBOD-5 effluent quality provided:
 - (i) The 30-day average shall not exceed 25 mg/l.
 - (ii) The 7-day average shall not exceed 40 mg/l.
 - (iii) The 30-day average percent removal shall not be less than 85 percent.

(b) SS.

- (1) The 30-day average shall not exceed 30 mg/l.
- (2) The 7-day average shall not exceed 45 mg/l.
- (3) The 30-day average percent removal shall not be less than 85 percent.

- (c) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

Subsection IV. Special considerations. [see 40 CFR 133.103]

- (a) Combined sewers. Treatment works subject to this Chapter may not be capable of meeting the percentage removal requirements established under Subsection III(a)(3) and Subsection III(b)(3), or Subsections VI(a)(3) and Subsection VI(b)(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-

case basis as to whether any attainable percentage removal level can be defined, and if so, what the level should be.

- (b) Industrial wastes. For certain industrial categories, the discharge to navigable waters of BOD-5 and SS permitted under sections 301(b)(1)(A)(i), (b)(2)(E) or 306 of the Act may be less stringent than the values given in Subsection III(a)(1), Subsection III(a)(4)(i), Subsection III(b)(1), Subsection VI(a)(1), Subsection VI(b)(1) and Subsection VI(e)(1)(i). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for BOD-5 and SS in Subsection III(a)(1), Subsection III(a)(4)(i), Subsection III(b)(1), Subsection VI(a)(1), Subsection VI(b)(1), and Subsection VI(e)(1)(i) maybe adjusted upwards provided that: (1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act if such industrial category were to discharge directly into the navigable waters, and (2) the flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for BOD-5 or SS in Subsection III(a)(2), Subsection III(a)(4)(ii), Subsection III(b)(2), Subsection VI(a)(2), Subsection VI(b)(2), and Subsection VI(e)(1)(ii) should be adjusted proportionately.
- (c) Waste stabilization ponds. The Department, subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in Subsections VI(b)(1), (b)(2), and (b)(3) for treatment works subject to this Chapter, to conform to the SS concentrations achievable with waste stabilization ponds, provided that: (1) Waste stabilization ponds are the principal process used for secondary treatment; and (2) operation and maintenance data indicate that the SS values specified in Subsections VI (b)(1),(b)(2), and (b)(3) cannot be achieved. The term ``SS concentrations achievable with waste stabilization ponds" means a SS value, determined by the Department, subject to EPA approval, which is equal to the effluent concentration achieved 90 percent of the time within a State or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD-5 specified in Subsection VI(a)(1).
- (d) Less concentrated influent wastewater for separate sewers. The Department is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in Subsection III(a)(3), Subsection III(a)(4)(iii), Subsection III(b)(3), Subsection VI(a)(3), Subsection VI(b)(3) and Subsection VI(e)(1)(iii) provided that the permittee satisfactorily demonstrates that: (1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater, (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and (3) the less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is non excessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.
- (e) Less concentrated influent wastewater for combined sewers during dry weather. The Department is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in Subsection III(a)(3), Subsection III(a)(4)(iii),

Subsection III(b)(3), Subsection VI(a)(3), Subsection VI(b)(3) and Subsection VI(e)(1)(iii) provided that the permittee satisfactorily demonstrates that: (1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits, but the percent removal requirements cannot be met due to less concentrated influent wastewater; (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent effluent concentrations than would otherwise be required by the concentration-based standards; and (3) the less concentrated influent wastewater does not result from either excessive infiltration or clear water industrial discharges during dry weather periods. The determination of whether the less concentrated wastewater results from excessive infiltration is discussed in 40 CFR 35.2005(b)(28), plus the additional criterion that either 40 gallons pre capita per day (gpcd) or 1500 gallons per inch diameter per mile of sewer (gpdim) may be used as the threshold value for that portion of the dry weather base flow attributed to infiltration. If the less concentrated influent wastewater is the result of clear water industrial discharges, then the treatment works must control such discharges pursuant to Chapter 528.

Subsection V. Sampling and test procedures. [see 40 CFR 133.104]

- (a) Sampling and test procedures for pollutants listed in this Chapter shall be in accordance with guidelines promulgated by the Administrator in 40 CFR part 136.
- (b) Chemical oxygen demand (COD) or total organic carbon (TOC) maybe substituted for BOD-5 when a long-term BOD:COD or BOD:TOC correlation has been demonstrated.

Subsection VI. Treatment equivalent to secondary treatment. [see 40 CFR 133.105]

This subsection describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment (Subsection II(g)) in terms of the parameters--BOD-5, SS and pH. All requirements for the specified parameters in paragraphs(a), (b) and (c) of this subsection shall be achieved except as provided for in Subsection IV, or paragraphs (d), (e) or (f) of this subsection.

(a) BOD-5.

- (1) The 30-day average shall not exceed 45 mg/l
- (2) The 7-day average shall not exceed 65 mg/l.
- (3) The 30-day average percent removal shall not be less than 65 percent.

(b) SS. Except where SS values have been adjusted in accordance with Subsection IV(c):

- (1) The 30-day average shall not exceed 45 mg/l.
- (2) The 7-day average shall not exceed 65 mg/l.
- (3) The 30-day average percent removal shall not be less than 65 percent.

(c) pH. The requirements of Subsection III(c) shall be met.

(d) Alternative State requirements. Except as limited by paragraph(f) of this subsection, and after notice and opportunity for public comment, the Department, subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in paragraphs (a)(1), (a)(2), (b)(1) and (b)(2) of this subsection for trickling filter facilities and in paragraphs (a)(1) and (a)(2) of this subsection for waste stabilization pond facilities, to conform to the BOD-5 and SS effluent concentrations consistently achievable through proper operation and maintenance

(Subsection II(f)) by the median (50th percentile) facility in a representative sample of facilities within a State or appropriate contiguous geographical area that meet the definition of facilities eligible for treatment equivalent to secondary treatment (Subsection II(g)).

(e) CBOD-5 limitations:

(1) Where data are available to establish CBOD-5 limitations for a treatment works subject to this subsection, the NPDES permitting authority may substitute the parameter CBOD-5 for the parameter BOD-5 in Subsections VI(a)(1), (a)(2) and (a)(3), on a case-by-case basis provided that the levels of CBOD-5 effluent quality are not less stringent than the following:

- (i) The 30-day average shall not exceed 40 mg/l.
- (ii) The 7-days average shall not exceed 60 mg/l.
- (iii) The 30-day average percent removal shall not be less than 65 percent.

(2) Where data are available, the parameter CBOD-5 may be used for effluent quality limitations established under paragraph (d) of this subsection. Where concurrent BOD effluent data are available, they must be submitted with the CBOD data as a part of the approval process outlined in paragraph (d) of this subsection.

(f) Permit adjustments. Any permit adjustment made pursuant to this Chapter may not be any less stringent than the limitations required pursuant to Subsections VI(a)-(e). Furthermore, permitting authorities shall require more stringent limitations when adjusting permits if:

- (1) For existing facilities the permitting authority determines that the 30-day average and 7-day average BOD-5 and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations, or
- (2) For new facilities, the permitting authority determines that the 30-day average and 7-day average BOD-5 and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, considering the design capability of the treatment process and geographical and climatic conditions, would enable the treatment works to achieve more stringent limitations.

Section 4. General Provisions. [see 40 CFR part 401]

Subsection I. Scope and purpose. [see 40 CFR 401.10] Regulations promulgated or proposed under Section 5 and Chapter 528 prescribe effluent limitations guidelines for existing sources, standards of performance for new sources and pretreatment standards for new and existing sources pursuant to sections 301, 304 (b) and (c), 306 (b) and (c), 307 (b) and (c) and 316(b) of the Federal Water Pollution Control Act, as amended (the "Act"), 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), 1317 (b) and (c) and 1326(b); 86 Stat. 816; Pub. L. 92-500. Point sources of discharges of pollutants are required to comply with these regulations, where applicable, and permits issued by States or the Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) established pursuant to section 402 of the Act must be conditioned upon compliance with applicable requirements of sections 301 and 306 of the Act (as well as certain other requirements). This Section sets forth the legal authority and general definitions which will apply to all regulations issued concerning specific classes and categories of point sources under

Section 5 and Chapter 528 which follow. In certain instances the regulations applicable to a particular point source category or sub category will contain more specialized definitions. Except as provided in Subsection VIII, in the case of any conflict between regulations issued under this Section and regulations issued under Section 5 and Chapter 528, the latter more specific regulations shall apply.

Subsection II. General definitions. [see 40 CFR 401.11]

For the purposes of the regulations incorporated by section 5 of this chapter:

(a)-(l) [reserved]

(m) The terms state water pollution control agency, interstate agency, State, municipality, person, territorial seas, contiguous zone, biological monitoring, schedule of compliance, and industrial user shall be defined in accordance with section 502 of the Act unless the context otherwise requires.

(n) The term noncontact cooling water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product.

(o) The term noncontact cooling water pollutants means pollutants present in noncontact cooling waters.

(p) The term blowdown means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practice.

(q)-(r) [reserved] (s) The following abbreviations shall have the following meanings:

- (1) BOD5 means five-day biochemical oxygen demand;
- (2) COD means chemical oxygen demand;
- (3) TOC means total organic carbon;
- (4) TDS means total dissolved solids;
- (5) TSS means total suspended non-filterable solids;
- (6) kw means kilowatt(s);
- (7) kwh means kilowatt hour(s);
- (8) Mw means megawatt(s);
- (9) Mwh means megawatt hour(s);
- (10) hp means horsepower;
- (11) mm means millimeter(s);
- (12) cm means centimeter;
- (13) m means meter(s);
- (14) in. means inch;
- (15) ft means foot (feet);
- (16) l means liter(s);
- (17) cu m means cubic meter(s);
- (18) k cu m means 1000 cubic meter(s);
- (19) gal means gallon(s);
- (20) cu ft means cubic foot (feet);
- (21) mg means milligram(s);

- (22) g means gram(s);
- (23) kg means kilogram(s);
- (24) kkg means 1000 kilogram(s);
- (25) lb means pound(s);
- (26) sq m means square meter(s);
- (27) ha means hectare(s);
- (28) sq ft means square foot (feet); and
- (29) ac means acre(s).

Subsection III. Law authorizing establishment of effluent limitations guidelines for existing sources, standards of performance for new sources and pretreatment standards of new and existing sources. [see 40 CFR 401.12]

- (a) Section 301(a) of the Act provides that ``except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful."
- (b) Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best practicable control technology currently available as determined by the Administrator pursuant to section 304(b)(1) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b)(2) of the Act.
- (c) Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods and other alternatives.
- (d) Section 304(c) of the Act requires the Administrator, after consultation with appropriate Federal and State agencies and other interested persons to issue information on the process, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of the Act.
- (e) Section 306(b)(1)(B) of the Act requires the Administrator, after a category of sources is included in a list published pursuant to section 306(b)(1)(A) of the Act, to propose regulations establishing Federal standards of performances for new sources within such category. Standards of performance are to provide for the control of the discharge of pollutants which reflect the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

- (f) Section 307(b) provides that the Administrator shall establish pretreatment standards which shall prevent the discharge of any pollutant into publicly owned treatment works which pollutant interferes with, passes through untreated, or otherwise is incompatible with such works.
- (g) Section 307(c) of the Act provides that the Administrator shall promulgate pretreatment standards for sources which would be "new sources" under section 306 (if they were to discharge pollutants directly to navigable waters) at the same time standards of performance for the equivalent category of new sources are promulgated.
- (h) Section 316(b) of the Act provides that any standard established pursuant to section 301 or section 306 of the Act and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.
- (i) Section 402(a)(1) of the Act provides that the Administrator may issue permits for the discharge of any pollutant upon condition that such discharge will meet all applicable requirements under sections 301, 302, 306, 307, 308 and 403 of this Act. In addition, section 402(b)(1)(A) of the Act requires that permits issued by States under the National Pollutant Discharge Elimination System (NPDES) established by the Act must apply, and insure compliance with any applicable requirements of sections 301, 302, 306, 307 and 403 of the Act.

Subsection IV Test procedures for measurement. [see 40 CFR 401.13]

The test procedures for measurement which are prescribed at 40 CFR part 136 shall apply to expressions of pollutant amounts, characteristics or properties in effluent limitations guidelines and standards of performance and pretreatment standards as set forth at Subsection 5 and Chapter 528, unless otherwise specifically noted or defined.

Subsection V. Cooling water intake structures. [see 40 CFR 401.14]

The location, design, construction and capacity of cooling water intake structures of any point source for which a standard is established pursuant to section 301 or 306 of the Act shall reflect the best technology available for minimizing adverse environmental impact, in accordance with the provisions of 40 CFR part 402.

Subsection VI. Toxic pollutants. [see 40 CFR 401.15]

The following comprise the list of toxic pollutants designated pursuant to section 307(a)(1) of the Act:

1. Acenaphthene
2. Acrolein
3. Acrylonitrile
4. Aldrin/Dieldrin \1\
5. Antimony and compounds \2\
6. Arsenic and compounds
7. Asbestos
8. Benzene
9. Benidine \1\

10. Beryllium and compounds
11. Cadmium and compounds
12. Carbon tetrachloride
13. Chlordane (technical mixture and metabolites)
14. Chlorinated benzenes (other than di-chlorobenzenes)
15. Chlorinated ethanes (including 1,2-di-chloroethane, 1,1,1-trichloroethane, and hexachloroethane)
16. Chloroalkyl ethers (chloroethyl and mixed ethers)
17. Chlorinated naphthalene
18. Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols)
19. Chloroform
20. 2-chlorophenol
21. Chromium and compounds
22. Copper and compounds
23. Cyanides
24. DDT and metabolites \1\
25. Dichlorobenzenes (1,2-, 1,3-, and 1,4-di-chlorobenzenes)
26. Dichlorobenzidine
27. Dichloroethylenes (1,1-, and 1,2-dichloroethylene)
28. 2,4-dichlorophenol
29. Dichloropropane and dichloropropene
30. 2,4-dimethylphenol
31. Dinitrotoluene
32. Diphenylhydrazine
33. Endosulfan and metabolites
34. Endrin and metabolites \1\
35. Ethylbenzene
36. Fluoranthene
37. Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether, bis(dichloroisopropyl) ether, bis-(chloroethoxy) methane and polychlorinated diphenyl ethers)
38. Halomethanes (other than those listed elsewhere; includes methylene chloride, methylchloride, methylbromide, bromoform, dichlorobromomethane)
39. Heptachlor and metabolites
40. Hexachlorobutadiene
41. Hexachlorocyclohexane
42. Hexachlorocyclopentadiene
43. Isophorone
44. Lead and compounds
45. Mercury and compounds
46. Naphthalene
47. Nickel and compounds
48. Nitrobenzene
49. Nitrophenols (including 2,4-dinitrophenol, dinitrocresol)
50. Nitrosamines
51. Pentachlorophenol
52. Phenol
53. Phthalate esters

54. Polychlorinated biphenyls (PCBs) \1\
55. Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenz-anthracenes, and indenopyrenes)
56. Selenium and compounds
57. Silver and compounds
58. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)
59. Tetrachloroethylene
60. Thallium and compounds
61. Toluene
62. Toxaphene \1\
63. Trichloroethylene
64. Vinyl chloride
65. Zinc and compounds

\1\ Effluent standard promulgated (40 CFR part 129)

\2\ The term compounds shall include organic and inorganic compounds

Subsection VII. Conventional pollutants. [see 40 CFR 401.16]

The following comprise the list of conventional pollutants designated pursuant to section 304(a)(4) of the Act:

1. Biochemical oxygen demand (BOD)
2. Total suspended solids (non filterable) (TSS)
3. pH
4. Fecal coliform
5. Oil and grease

Subsection VIII. pH Effluent limitations under continuous monitoring. [see 40 CFR 401.17]

(a) Where a permittee continuously measures the pH of wastewater pursuant to a requirement or option in a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to section 402 of the Act, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable effluent limitations guidelines, except excursions from the range are permitted subject to the following limitations:

- (1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
- (2) No individual excursion from the range of pH values shall exceed 60 minutes.

(b) The Department, may adjust the requirements set forth in paragraph (a) of this section with respect to the length of individual excursions from the range of pH values, if a different period of time is appropriate based upon the treatment system, plant configuration or other technical factors.

(c) For purposes of this subsection, an excursion is an unavoidable malfunction as defined in 38 MRSA, §349(9)(B) in which the pH value of discharge wastewater exceeds the range set forth in the applicable effluent limitations guidelines.

Section 5. Effluent Standards for Specific Industrial Point Source Categories.

For the purposes of this Chapter, effluent limitations for discharges from new and existing industrial activities discharging to Waters of the State and pretreatment standards for new and existing industrial activities discharging to publicly owned treatment works shall not exceed those set forth in the following parts of 40 CFR, effective July 1, 1998, which are incorporated herein by reference.

- (1) Part 405, Dairy products processing point source category.
- (2) Part 406, Grain mills point source category.
- (3) Part 407, Canned and preserved fruits and vegetables processing point source category.
- (4) Part 408, Canned and preserved seafood processing point source category.
- (5) Part 409, Sugar processing point source category.
- (6) Part 410, Textile mills point source category.
- (7) Part 411, Cement manufacturing point source category.
- (8) Part 412, Feedlots point source category.
- (9) Part 413, Electroplating point source category.
- (10) Part 414, Organic chemicals, plastics, and synthetic fibers.
- (11) Part 415, Inorganic chemicals manufacturing point source category.
- (12) Part 416, Reserved.
- (13) Part 417, Soap and detergent manufacturing point source category.
- (14) Part 418, Fertilizer manufacturing point source category.
- (15) Part 419, Petroleum refining point source category.
- (16) Part 420, Iron and steel manufacturing point source category.
- (17) Part 421, Nonferrous metals manufacturing point source category.
- (18) Part 422, Phosphate manufacturing point source category.
- (19) Part 423, Steam electric power generating point source category.
- (20) Part 424, Ferroalloy manufacturing point source category.
- (21) Part 425, Leather tanning and finishing point source category.
- (22) Part 426, Glass manufacturing point source category.
- (23) Part 427, Asbestos manufacturing point source category.
- (24) Part 428, Rubber manufacturing point source category.
- (25) Part 429, Timber products processing point source category.
- (26) Part 430, Pulp, paper, and paperboard point source category.
- (27) Part 431, The builders' paper and board mills point source category.
- (28) Part 432, Meat products point source category.
- (29) Part 433, Metal finishing point source category.
- (30) Part 434, Coal mining point source category BPT, BAT, BCT limitations and new sources performance standards.
- (31) Part 435, Oil and gas extraction point source category.
- (32) Part 436, Mineral mining and processing point source category.
- (33) Part 439, Pharmaceutical manufacturing point source category.
- (34) Part 440, Ore mining and dressing point source category.
- (35) Part 443, Effluent limitations guidelines for existing sources and standards of performance and pretreatment standard for new sources for the paving and roofing materials (tars and asphalt) point source category.
- (36) Part 446, Paint formulating point source category.
- (37) Part 447, Ink formulating point source category.
- (38) Part 454, Gum and wood chemicals manufacturing point source category.
- (39) Part 455, Pesticide chemicals.

- (40) Part 457, Explosives manufacturing point source category.
- (41) Part 458, Carbon black manufacturing point source category.
- (42) Part 459, Photographic point source category.
- (43) Part 460, Hospital point source category.
- (44) Part 461, Battery manufacturing point source category.
- (45) Part 463, Plastics molding and forming point source category.
- (46) Part 464, Metal molding and casting point source category.
- (47) Part 465, Coil coating point source category.
- (48) Part 466, Porcelain enameling point source category.
- (49) Part 467, Aluminum forming point source category.
- (50) Part 468, Copper forming point source category.
- (51) Part 469, Electrical and electronic components point source category.
- (52) Part 471, Nonferrous metals forming and metal powders point source category.

AUTHORITY: 38 MRSA §§ 341-D and 414-A

EFFECTIVE DATE: This rule will become effective upon the approval of the U.S. Environmental Protection Agency of related parts of the State's application to administer the National Pollutant Discharge Elimination System program of the Federal Clean Water Act, pursuant to 40 CFR part 123.